

IN THE CLAIMS

16. (cancel) A handpiece for connection to electrosurgical apparatus and comprising fingerswitches for selectively providing cutting mode or coagulation mode electrosurgical currents from the electrosurgical apparatus to an electrode connected to the handpiece, said handpiece comprising:

- (a) a pencil-like housing,
- (b) at least first and second fingerswitches on the housing,
- (c) means on the housing for receiving and holding an electrode for delivering RF electrosurgical currents,
- (d) means connected to the housing for supplying a control DC or AC current to the fingerswitches,
- (e) means connecting the fingerswitches such that when the first fingerswitch is activated a first DC or AC current level is established and when the second fingerswitch is activated a second DC or AC current level is established,
- (f) said first and second DC or AC current levels being usable to select an operating mode of the electrosurgical apparatus.

17. (Amended) A handpiece according to claim ~~16~~ 19, further comprising an electrical connector comprising three terminals and connected at a side of the housing, one of the three terminal being connected to the electrode and the other two of the three terminals being connected to the fingerswitches, the first and second current levels being available at the same connector terminal.

18. (Amended) A handpiece according to claim ~~16~~ 19, wherein the handpiece comprises 3 finger switches.

19. (Amended) A handpiece for connection to electrosurgical apparatus and comprising fingerswitches for selectively providing cutting mode or coagulation mode electrosurgical currents from the electrosurgical apparatus to an electrode connected to the handpiece, said handpiece comprising:

- (a) a pencil-like housing,
- (b) at least first and second fingerswitches on the housing,
- (c) means on the housing for receiving and holding an electrode for delivering RF

electrosurgical currents,

(d) means connected to the housing for supplying a control DC or AC current to the fingerswitches,

(e) means connecting the fingerswitches such that when the first fingerswitch is activated a first DC or AC current level is established and when the second fingerswitch is activated a second DC or AC current level is established,

(f) said first and second DC or AC current levels being usable to select an operating mode of the electrosurgical apparatus,

according to claim 16,

(g) further comprising an electrode fixed to the handpiece, the electrode being associated with the selected operating mode.

20. (Amended) A handpiece according to claim 19, wherein the electrosurgical currents are RF electrosurgical currents, and the RF electrosurgical currents are in the megacycle range, and the control current is a DC or AC current in the kilocycle or lower range, and the electrode is molded to the handpiece.

21. (Amended) A handpiece for connection to electrosurgical apparatus and comprising fingerswitches for selectively providing cutting mode or coagulation mode electrosurgical currents from the electrosurgical apparatus to an electrode connected to the handpiece, said handpiece comprising:

(a) a pencil-like housing,

(b) at least first and second fingerswitches on the housing,

(c) means on the housing for receiving and holding an electrode for delivering RF electrosurgical currents,

(d) means connected to the housing for supplying a control DC or AC current to the fingerswitches,

(e) means connecting the fingerswitches such that when the first fingerswitch is activated a first DC or AC current level is established and when the second fingerswitch is activated a second DC or AC current level is established,

(f) said first and second DC or AC current levels being usable to select an operating mode of the electrosurgical apparatus,

~~according to claim 16,~~

(g) further comprising a non-volatile read/write memory in the handpiece, said memory storing data items representing operating modes of the electrosurgical apparatus.

22. (cancel) A procedure-specific handpiece for connection to electrosurgical apparatus for providing one of cutting mode or coagulation mode electrosurgical currents from the electrosurgical apparatus to an electrode connected to the handpiece, said handpiece comprising:

(a) a pencil-like housing,

(b) means on the housing for receiving and holding an electrode for delivering RF electrosurgical currents,

(c) means in the handpiece for providing a control signal to the electrosurgical apparatus when activated,

(d) said control signal representing for the electrosurgical apparatus operating mode information associated with the specific procedure and usable by the electrosurgical apparatus to select an operating mode specific to the procedure.

23. (cancel) A handpiece according to claim 22, further comprising an electrode fixed to the handpiece, the electrode being associated with the specific procedure .

24. (cancel) A handpiece according to claim 23, wherein the RF electrosurgical currents are in the megacycle range, and the electrode is molded to the handpiece.

25. (cancel) A handpiece according to claim 22, further comprising a non-volatile read or read/write memory in the handpiece, said memory storing data items representing an operating mode of the electrosurgical apparatus specific to the procedure.

32. (cancel) In combination:

a) an electrosurgical apparatus comprising a microcontroller and being capable of being switched via the microcontroller between at least a first electrosurgical mode and a second electrosurgical mode upon the inputting of mode selection signals to the microcontroller, said electrosurgical apparatus when in the first electrosurgical mode generating RF electrosurgical current waveforms capable of performing a first electrosurgical procedure when applied via an electrosurgical electrode to a patient and when in the second electrosurgical mode generating different RF electrosurgical current

waveforms capable of performing a second different electrosurgical procedure when applied via the electrosurgical electrode to the patient,

b) a family of customized handpieces, each handpiece of the family comprising an electrode integral with and fixed to the handpiece and including means for generating unique control signals representative of mode selection signals, a first handpiece of the family including its electrode being customized for performing the first electrosurgical procedure and being associated with a specific first one of the control signals, a second handpiece of the family including its electrode being customized for performing the second electrosurgical procedure and being associated with a specific second one of the control signals,

c) means for connecting each of the handpieces of the family to the apparatus,

d) means connected to the microcontroller in response to receipt of the control signals from a connected handpiece of the family for supplying to the integral electrode RF electrosurgical currents in the selected mode customized for the procedure for which the handpiece is customized.

33. (cancel) The combination of claim 32, wherein each handpiece of the family comprises a housing and means connected to the handpiece housing for supplying a control current to the means for generating a unique control signal, said means for generating a unique control signal in response to the control current establishing a first or second current level, said first and second current levels serving as the mode selection signals and being usable by the microcontroller to select an operating mode of the electrosurgical apparatus associated with the first or second current level.

34. (cancel) The combination according to claim 32, wherein the electrosurgical apparatus comprises a look-up table connected to the microcontroller, the control signal representing a key to one of plural records in the look-up table, each of the records representing an operating mode of the electrosurgical apparatus.

35. (cancel) The combination according to claim 32, further comprising a non-volatile memory in the handpiece and accessible from the microcontroller.

36. (cancel) The combination according to claim 32, wherein the first electrosurgical mode is a cutting mode and the second electrosurgical mode is a

coagulation mode.